

FIG 1

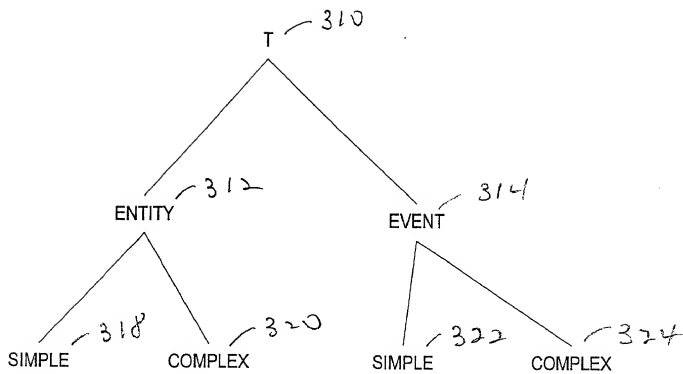


FIG. 2

510a

526

524

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514

mutual fund

mutual fund - 2

540

710 4

Create Type	Edit Type	Delete Type	Delete Sub	Rename Type	Change Super	Find Type
<p>ToolType *</p> <p>Entity * — 524</p> <p>Group *</p> <p>Immaterial Entity * — 522</p> <p>Individual Entity *</p> <p>Area *</p> <p>Celestial Body *</p> <p>Individuated Functional Entity — 520</p> <p>Individuated Instrumental Entity — 516</p> <p>Communication Medium * — 514</p> <p>Financial Instrument *</p>						
<p>Mutual Fund</p> <p>Payment Instrument</p> <p>Individuated Tool Entity PartOf</p> <p>Representational Artifact *</p> <p>Social Entity *</p> <p>Sound *</p> <p>Source *</p> <p>Virtual Object *</p> <p>Visual Image *</p> <p>Material Entity *</p>						
<p>Mutual Fund</p> <p>"a Complex GLEntry" — 550</p> <p>formal: #[[Company]] [[Financial Instrument]]</p> <p>indirectAgentive: [[Found Activity]]</p> <p>directTelic: [[Business Activity]]</p> <p>*InstrumentTelic: [[Invest Activity]]</p> <p>genre: [[Genre]]</p> <p>location: [[Locative Relation]]</p>				<p>mutual fund - 2</p> <p>"a CollocationalNounEntry"</p> <p>type: [[Mutual Fund]]</p> <p>name: mutual fund — 540</p>		
Create	Edit	X&G Mat	Copy	Rename	Delete	Multiple Del
				Find	Change Type	Change Types

5106

Clear Type	Edit Type	Create Type	Delete Type	Rename Type	Change Super	Find Type
<div> <div> <p> Come Into Contact Activity * Goal Created Activity * Accommodation Activity * Assessment Activity * Assistance Activity * Attempt Activity * Business Activity * Audit Activity * Invest Activity * </p> </div> <div> <p>614</p> </div> <div> <p>612</p> </div> </div>						
<div> <div> <p> Choose Activity * Classify Activity * CoAgentive Activity * Collect Activity * Commit Activity * Communication Process * Encourage Activity * Entertainment Activity * Espionage Activity * Function Activity * Hospitality Activity * Imitation Activity * Investigate Activity * Lead Activity * </p> </div> <div> <p>640</p> </div> </div>						
<div> <div> <p>Invest Activity</p> <p>"a Simple GLEvent"</p> <p>format: #[[Business Activity]]</p> <p>argumentStructure:</p> <p> externalArgument: [[Legal Entity]]</p> <p> theme: [[TopType]]</p> </div> <div> <p>640</p> </div> </div>						
<div> <div> <p>Invest - 3</p> <p>"a VerbEntry"</p> <p>type: [[Invest Activity]]</p> <p>subjectRole: externalArgument</p> <p>poRole: theme</p> <p>poHead: in</p> </div> <div> <p>635</p> <p>630</p> <p>636</p> <p>637</p> <p>638</p> </div> </div>						
<p>Gene</p> <p>Edit</p> <p>XO Mail</p> <p>Copy</p> <p>Rename</p> <p>Delete</p> <p>Multiple Del</p> <p>Find</p> <p>Change Type</p> <p>Change Color</p>						
<p> <input type="checkbox"/> Start <input type="checkbox"/> Work <input type="checkbox"/> Travel <input type="checkbox"/> TEEP <input type="checkbox"/> Learn <input type="checkbox"/> Equip <input type="checkbox"/> Funds <input type="checkbox"/> TS on <input type="checkbox"/> Task <input type="checkbox"/> Pace <input type="checkbox"/> TS on <input type="checkbox"/> TS d... </p>						

Fig 5

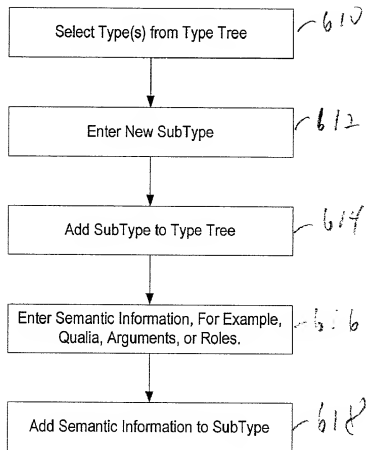


FIG. 6A

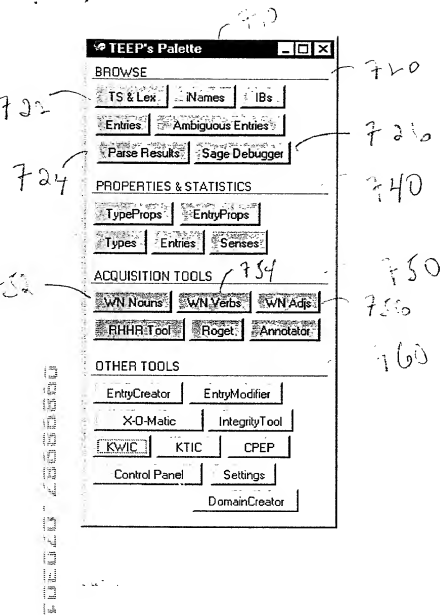


FIG 7

[illegible]

Fig. 12

514

810a

1310

1312

Top Type *

Entity *

Group *

Immaterial Entity *

Individualized Entity *

Area *

Celestial Body *

Individualized Functional Entity

Individualized Instrumental Entity

Communication Medium *

Financial Instrument *

Mutual Fund

Payment Instrument

Individualized Trust Entity PartOf

Representational Artifact *

Social Entity *

Sound *

Source *

Virtual Object *

Visual Image *

Material Entity *

a GL Entry

otherQuota

comment

localQuota

Soman

corpus

introduce

directAgentive

indirectAgentive

instrumentTelic

constitutiveRelation

hasElement

isElementOf

argumentBindings

Mutual Fund

"a Complex GLEntry"

formal #([Company]) ([Financial Instrument])

indirectAgentive ([Found Activity])

directTelic ([Business Activity])

instrumentTelic ([TopType])

genre ([Genre])

Create

Edit

X-D-Mat

Copy

Paste

Undo

Multiple Del

Change Type

Change Types

Fig 13

Create Type	Edit Type	Delete Type	Delete Subs	Rename Type	Change Super	Find Type
<p>TopType *</p> <p>Entity *</p> <p>Group *</p> <p>Immaterial Entity *</p> <p>Individuated Entity *</p> <p>Area *</p> <p>Celestial Body *</p> <p>Individuated Functional Entity</p> <p>Individuated Instrumental Entity</p> <p>Communication Medium *</p> <p>Financial Instrument *</p> <p>Mutual Fund</p> <p>Payment Instrument</p> <p>Individuated Tool Entity PartOf</p> <p>Representational Artifact *</p> <p>Social Entity *</p> <p>Sound *</p> <p>Source *</p> <p>Virtual Object *</p> <p>Visual Image *</p> <p>Material Entity *</p>						
<p>Mutual Fund</p> <p>"a Complex GLEntity"</p> <p>formal: #([Company]) [(Financial Instrument)]</p> <p>indirectAgentive: [(Found Activity)]</p> <p>directTelic: [(Business Activity)]</p> <p>*instrumentTelic: [(Invest Activity)]</p> <p>genre: [(Genre)]</p> <p>location: [(Locative Relation)]</p>						

Create	Edit	X-D-Mat	Copy	Rename	Delete	Multiple Del	Find	Change Type	Change Types

Fig 1-1

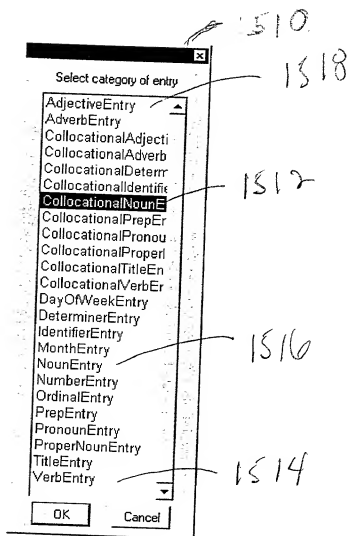


Fig. 15

Loading Saving Change Logs Views Tools
 Entity Type Edit Type Delete Type Delete Sub Rename Type Change Super First Type
 Entity
 Group
 Intermaterial Entity
 Indivisuated Entity
 Area
 Celestial Body
 Indivisuated Functional Entity
 Indivisuated Instrumental Entity
 Communication Medium
 Financial Instrument
 Payment Instrument
 Indivisuated Total Entity PartOf
 Representational Artifact
 Social Entity
 Sound
 Source
 Virtual Object
 Visual Image
 Material Entity
 Mutual Fund
 "a Complex GL-Entity"
 formal R[Company] [Financial Instrument]
 mutual fund
 Create Edit X-M-File Copy Rename Unlink Multiple Call Find Change Type Change Types

Fig 16-

810a

Loading Saving Change Logs Views Tools									
Create Type	Edit Type	Delete Type	Delete Subs	Rename Type	Change Super	Find Type			
TopType * Entity * Group * Immaterial Entity * Individuated Entity * Area * Celestial Body * Individuated Functional Entity Individuated Instrumental Entity Communication Medium * Financial Instrument *						mutual fund 1710			
Mutual Fund * Payment Instrument Individuated Tool Entity PartOf Representational Artifact * Social Entity * Sound * Source * Virtual Object * Visual Image * Material Entity *						550 1720 840			
Mutual Fund "a Complex GLEntity" formal: #([[Company]]) [[Financial Instrument]] indirectAgentive: [[Found Activity]] directTelic: [[Business Activity]] *instrumentTelic: [[Invest Activity]] genre: [[Genre]] location: [[Locative Relation]]						mutual fund - 2 "a CollocationalNounEntry" type: [[Mutual Fund]] - 542 name: mutual fund 1726			
Create	Edit	X.O.Mat	Copy	Rename	Delete	Multiple Del	Find	Change Type	Change Types

1710

Fig 18

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523</
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1210

64

2250

2210

2220

2240

2244

2240

2250

640

2252

Fig 20

Relational Process *
Abstract Entity Process *
Adventurous Activity *
Causation Activity *
Come Into Contact Activity *
Goal Directed Activity *
Accommodation Activity *
Assessment Activity *
Assistance Activity *
Attempt Activity *
Business Activity *
Audit Activity *
Invest Activity *
Choose Activity *
Classify Activity *
CoAgentive Activity *
Collect Activity *
Commit Activity *
Communication Process *
Encourage Activity *
Entertainment Activity *
Espionage Activity *

2210

2220

2240

2244

2240

2250

640

2252

Invest Activity
"a Simple GLEvent"

formal: #([Business Activity])

argumentStructure

*amount: [[Money]]

*externalArgument: [[Legal Entry]]

*theme: [[TopType]]

Create Edit XO Hdr Copy Rename Delete Multiple Del Find Change Type Change Types

2310

TS and Lexicon Browser

Loading Saving Change Logs Views Tools

Create Type Edit Type Delete Type Delete Subs Rename Type Change Super Find Type

Africa * American Country * Asia * Australia and Oceania * Country with ConstitutiveRelation Country with DirectAgentive Country with DirectTelic Country with HasElement Country with IndirectAgentive Country with IndirectTelic Country with InstrumentTelic Country with IsElementOf Europe * Eastern * European Mountains * Western Europe * Austria * Benelux Countries * France * France Region * French City * Germany *	2320 2322 2342	france french la patrie monaco monaco 2332 2330
France (France) "a Simple GLEntity" format: #([Western Europe]) constitutive: [[Origin Relation]] genre: [[Genre]] location: [[Locative Relation]]	2350 2346	french - 1 "an AdjectiveEntry" type: [[France]] 2344 2340 2346

Create Edit X-O Mat Copy Rename Delete Multiple Del Find Change Type Change Types

Fig 21

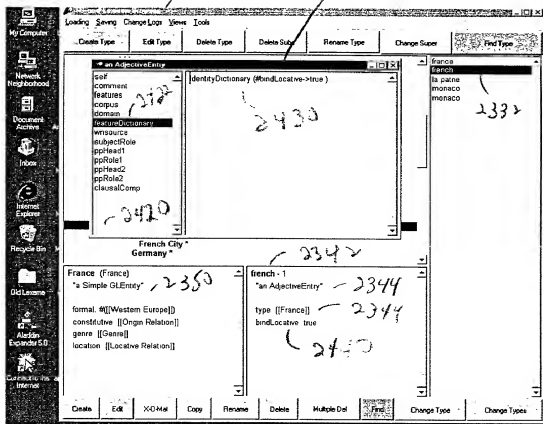


Fig 22

Sage Tracer/Debugger

Inspect: [step]

Input: recipes for soup

Populate: [] Query: [] Parse: []

Active edges: [] Inactive edges: []

Edge 1.4: Utterance => NP >

Edge 1.4: NP => NP PP >

Edge 1.2: Utterance => NP >

Edge 1.2: NP => CoreNP >

Edge 1.2: CoreNP => NBar >

Edge 1.2: NBar => N >

Edge 1.2: N => N >

String: recipes for soup

Rule: [] Utterance => NP

UtteranceLexLF

type: [[Question]]

string: recipes for soup

illocutionaryForce: Selection

content: [[EntityLexLF]]

type: [[Recipes]]

value: recipe

directTelec: [[FunctionLexLF]]

type: [[Prepares Food Activity]]

externalArgument: [[EntityLexLF]]

type: [[Recipes]]

value: recipe

theme: [[EntityLexLF]]

NP

CoreNP

NBar

recipes

PP

for

NP

CoreNP

NBar

soup

Sage Tracer/Debugger

Inspect: [step]

Input: recipes for soup

Populate: [] Query: [] Parse: []

Active edges: [] Inactive edges: []

Edge 1.2: AdjBar => NBar: Punctuation AdjBar >

Edge 1.2: AdjBar => NBar: AdjBar >

Edge 1.2: NP => NP: Complement(VP) >

Edge 1.2: NP => NP: RelS >

Edge 1.2: NP => NP: Punctuation Conj NP >

Edge 1.2: NP => NP: Punctuation NP >

Edge 1.2: NP => NP: Conj NP >

Edge 1.2: NP => NP: Conj NP >

Edge 1.2: DeterminerGroup => NP: POS >

Edge 1.2: ComplementS => NP: VP >

Edge 1.2: RootS => NP: VP >

Edge 1.2: Utterance => NP: EndPunct >

String: recipes

Rule: [] NP => NP PP (Take of PC Complement) (PP Complement of NP)

EntityLexLF

type: [[Recipes]]

value: recipe

directTelec: [[FunctionLexLF]]

type: [[Prepares Food Activity]]

externalArgument: [[EntityLexLF]]

type: [[Recipes]]

value: recipe

theme: [[EntityLexLF]]

type: [[Soup]]

value: soup

NP

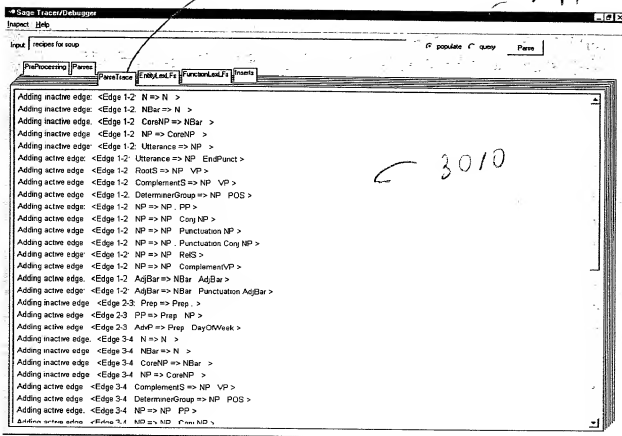
CoreNP

NBar

recipes

2940

2710



Input: recipes for soup

R: populate C: query

Parse

Preprocessing

Parse

Parse/Trace

Entry/Lex/Lf

Function/Lex/Lf

Items

Adding inactive edge <Edge 3-4 NP => CoreNP >
 Adding active edge <Edge 3-4 ComplementS => NP VP >
 Adding active edge <Edge 3-4 DeterminerGroup => NP POS >
 Adding active edge <Edge 3-4 NP => NP PP >
 Adding active edge <Edge 3-4 NP => NP Conj NP >
 Adding active edge <Edge 3-4 NP => NP Punctuation NP >
 Adding active edge <Edge 3-4 NP => NP Punctuation Conj NP >
 Adding active edge <Edge 3-4 NP => NP RelS >
 Adding active edge <Edge 3-4 NP => NP ComplementVP >
 Matching <Edge 2-3 PP => Prep NP > with <Edge 3-4 NP => CoreNP >
 Adding inactive edge <Edge 2-4 PP => Prep NP >
 Matching <Edge 1-2 NP => NP PP > with <Edge 2-4 PP => Prep NP >
 Adding inactive edge <Edge 1-4 NP => NP PP >
 Adding inactive edge <Edge 1-4 Utterance => NP >
 Adding active edge <Edge 1-4 Utterance => NP EndPunct >
 Adding active edge <Edge 1-4 RootS => NP VP >
 Adding active edge <Edge 1-4 ComplementS => NP VP >
 Adding active edge <Edge 1-4 DeterminerGroup => NP POS >
 Adding active edge <Edge 1-4 NP => NP PP >
 Adding active edge <Edge 1-4 NP => NP Conj NP >
 Adding active edge <Edge 1-4 NP => NP Punctuation NP >
 Adding active edge <Edge 1-4 NP => NP Punctuation Conj NP >
 Adding active edge <Edge 1-4 NP => NP RelS >
 Adding active edge <Edge 1-4 NP => NP ComplementVP >
 Adding active edge <Edge 3-4 AdjBar => NBar AdjBar >
 Adding active edge <Edge 3-4 AdjBar => NBar Punctuation AdjBar >
 Adding active edge <Edge 3-4 AdjBar => N NBar >

3000

Fig 260

Parse Results Browser

Parsing Information Basics

Sentence: recipes for soup

Parse III: All Edges

Semantics: Tree Edges

<Utterance recipes for soup>

<NP recipes for soup>

3310

<NP recipes>

<PP for soup>

<CoreNP recipes>

<Prep for (for)>

<NP soup>

<NBar recipes>

<CoreNP soup>

<N recipes (recipe)>

<NBar soup>

<N soup (soups)>

Fig 28

[illegible]

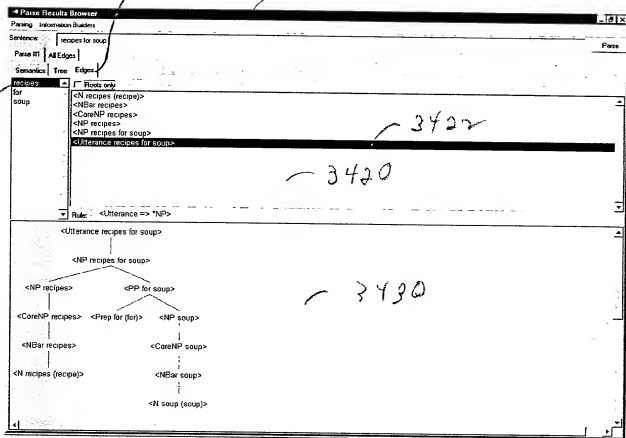


Fig 29

3520 3550 3510

Sage: Tracer/Debugger

Input: tell me about asian cuisine populate if query Parse

PostProcessing Parse Parse/trace ExtractEdges Select

<Edge 1.6: Utterance => VP >

3705

<Edge 1.6: VP => VP NP >

<Edge 1.4: VP => VBar >

<Edge 1.4: VBar => V >

<Edge 1.4: V => V >

<Edge 4.6: NP => CoreNP >

<Edge 4.6: CoreNP => NBar >

<Edge 4.6: NBar => AdjBar NBar >

<Edge 4.6: AdjBar => Adj >

<Edge 4.6: Adj => Adj >

<Edge 5.6: NBar => N >

<Edge 5.6: N => N >

3730

Rule: <Utterance => VP (Impulsive) (Impulsive/Inacc)

|| EntityLexF

type [[Food]]

value cuisine

location || FunctionLexF

type [[Locative Relation]]

externalArgument: || EntityLexF

type [[Food]]

value cuisine ||

locative || EntityLexF

type [[Asia]]

value Asia || ||

Utterance

VP

VBar

tell me about

NP

CoreNP

NBar

AdjBar

asian

NBar

cuisine

3710

3720

Fig 31